upon his duties on January 1, 1901, soon after which date the college will, it is expected, be ready to receive pupils.

AT a general meeting of Convocation of the University of London, held on Tuesday last, the following were elected to serve as members of the Senate under Section 12 of the statute of the reconstructed University:—Mr. John Fletcher Moulton, Dr. J. D. McClure, Sir A. Kaye Rollit, Dr. T. B. Napier, Dr. J. B. Benson, Dr. T. L. Mears, Sir H. H. Cozens-Hardy, Dr. T. Barlow, Mr. J. F. Payne, Sir Philip Magnus, Dr. S. Bryant, Dr. C. W. Kimmins, Dr. F. Clowes, Prof. Silvanus Thompson, Dr. F. S. Macaulay, and Mr. J. W. Sidebotham.

DURING the past week very many addresses have been delivered to students at the opening of the winter sessions of the various science, technical and medical schools in London and the provinces, in the course of which much excellent advice has been given. An article dealing with some of the utterances made to medical students is to be found in another part of the present issue. In this column we refer, and only very briefly, to two addresses given to students of other branches of knowledge, viz. those by Sir Alexander Binnie at the opening of the Central Technical College, on October 2, and by Prof. Le Neve Foster at the distribution of medals, prizes, &c., to the students of the Royal College of Science, on October 4. The subjects chosen for their addresses by both speakers were well suited to the occasion, and should prove of much service to the audiences who listened to them. Prof. Foster took as his topic "Common Sense," in the course of which he referred to the remark of Prof. Huxley that science was organised common sense, and the two or three years' training in science which students received at the college was, therefore, simply training in ordinary common sense. If they wished to succeed in any calling they must exercise the faculty of thought. It was difficult to realise that times were changing, but change was everywhere taking place, and they must throw aside the idea that in the production of British manufactures the methods that had come down to them from their forefathers were necessarily the best. In Lancashire it was said that what Lancashire did to-day Great Britain would do to-morrow. They might say that what the scientific man did to-day the manufacturing man would do to-morrow. The laboratory experiment of to-day was, in fact, the manufacturing process of to-morrow. But if the student desired to take an active part in the improvement of the industrial life of the country and of manufacturing processes, he must work hard and not place too much reliance on his teacher. All that the professor could do was to give the student a general ground-work upon which afterwards by his own experiments he could build up his frame-work of knowledge. Sir A. Binnie in his address contrasted the advantages which students of to-day have over those educated in the middle of the present century, and urged upon his hearers not to confine themselves merely to the curriculum of study laid before them, or to take too narrow a view or devote themselves exclusively to one particular branch of learning. The aim of the speaker was to impress upon his audience that to be a true student of science the mind must be opened out and widely cultivated by observation to grasp every detail, as it often occurs that it is among the almost unnoticed minutiæ of a particular science that those wonderful correlations that lead in the future to wide results are to be found. He spoke of the necessity of acquiring a wide and broad view of the subjects which should engage the student's attention for the reason that he felt that education could only be complete when studied as a whole, and the beauty of all the different sciences brought clearly before the mind. Further, one can never tell, when entering upon active work, into what avenues or by-paths of practice he may be led, and to illustrate this Sir A. Binnie referred to his own experience. He also urged upon his hearers to study the history of their profession, and of the various discoveries which have been made in the different branches of science to which they would apply themselves. Altogether the students are to be congratulated upon the helpful advice tendered to them.

SOCIETIES AND ACADEMIES.

PARIS.

Academy of Sciences, October 1.—M. Maurice Lévy in the chair.—On the absorption of free oxygen by normal urine, by M. Berthelot. Normal urine absorbs free oxygen in amounts larger than those corresponding to the solubility of oxygen in water. The acidity is not altered by the absorption.—Remarks on the acidity of urine, by M. Berthelot.—On the distribution of the horizontal component of the earth's magnetism in France, by M. E. Mathias. As the result of work spread over a period of six years in the neighbourhood of Toulouse, it was found that a very simple formula would combine the results of all the observations, namely: $\Delta H = -1'26\ (\Delta \text{ long.}) - 7'42\ (\Delta \text{ lat.})$, in which ΔH was the difference between the measurement for an element at a place X and that of the corresponding element at Toulouse. It was further found that the above formula applies to the whole of France.—On the selenides of nickel, by M. Fonzes-Diacon. Nickel leaflets heated in a current of nitrogen carrying small quantities of selenium vapour give cubical crystals of a selenide of the composition NiSe. Another selenide approximating in composition to Ni_3S_4 is obtained by heating anhydrous nickel chloride in a current of hydrogen selenide at a dull red heat. At 300° C. the diselenide NiS_2 is obtained as a greyish-black, friable mass. All these products heated to a white heat in a current of hydrogen give a sub-selenide, Ni_2Se.—Oxycelluloses from cotton, flax and hemp, by M. Leo Vignon. Purified fibres of various textile material were submitted to the oxidising action of hydrochloric acid and potassium chlorate; the yield in all cases was the same, about 70 per cent.; phenylhydrazine furnished the same osazone. Small differences were observed in the reducing powers of the oxycelluloses from different sources.—On the mutability of *Œnothera Lamarckiana*, by M. Hugo de Vries. This furnishes an example of the rare phenomenon of a state of mutability in a pure species. The new species appears suddenly without preliminary or intermediate stages; the transformed individual shows all the characters of a new type, although the parents and grandparents are absolutely normal. The seeds of the transformed individuals give rise to the new type only, no tendency being observed to revert to the characters of *Œ. Lamarckiana*.—On the Eocene of Tunis and Algiers, by M. L. Pervinquiere.—The ravine of Chevalleyres and the retrogression of torrents, by M. Stanislas Meunier. Attention is drawn to the mode of formation of this *col*, the size of which would appear out of all proportion to the small stream to which the ravine is undoubtedly due. The transfer of rock masses, and other effects usually ascribed to glacier action, may be traced to this torrent.—Observations of a meteor which fell on the evening of September 24, by M. Jean Mascart. The meteor, the nucleus of which was star-like and very bright, was seen at 10.16 p.m. on September 24 between Meudon and Bellevue.

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